

**REMARKS**

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-7 are all the claims pending in the application. Applicant respectfully submits that the pending claims define patentable subject matter.

Claims 1, 3, 6 and 7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Tremblay et al. (U.S. Patent No. 4,823,360; hereafter "Tremblay"). Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Tremblay in view of Bulow (U.S. Patent No. 6,016,379). Applicant respectfully traverses the rejections.

Amended independent claims 1 and 3 require an eye monitor which comprises:

first and second threshold-value decision elements for deciding a level of a data signal based on first and second threshold values which are set close to vertices of an eye opening of an eye diagram;

first and second signal comparators for determining pseudo-errors by comparing decided signals output by the threshold-value decision elements with a an already decided signal;

first and second integrators for integrating the pseudo-errors output by the first and second signal comparators to generate first and second internal control variables; and

first and second regulators which correct the first and second threshold values based on comparisons between the first and second internal control variables and first and second setpoint values, respectively.

Applicant respectfully submits that it is quite clear that Tremblay does not teach or suggest the claimed first and second regulators.

The Examiner asserts that the claimed first integrator reads on Tremblay's differential integrator formed by a resistor 60, a differential amplifier 64 and a capacitor 68, and the claimed second integrator reads on Tremblay's differential integrator formed by a resistor 62, a differential amplifier 66 and a capacitor 70. The differential integrator formed by elements 60, 64 and 68 outputs a threshold level  $V^+$  which necessarily corresponds the claimed first internal control variable if the differential integrator formed by elements 60, 64 and 68 corresponds to the claimed first integrator as the Examiner asserts. The differential integrator formed by elements 62, 66 and 70 outputs a threshold level  $V^-$  which necessarily corresponds the claimed second internal control variable if the differential integrator formed by elements 62, 66 and 70 corresponds to the claimed second integrator as the Examiner asserts.

The Examiner asserts that Tremblay discloses the claimed first and second regulators without pointing out which elements of Fig. 3 (or any of the other figures) of Tremblay allegedly correspond the claimed first and second regulators. Instead, the Examiner cites "fig. 3, elements  $V_{ref}^+$  and  $V_{ref}^-$  and col. 4, lines 57-63 and col. 5, lines 1-7" in support of the rejection. However,  $V_{ref}^+$  and  $V_{ref}^-$  are reference voltages which are supplied to the inputs of the differential amplifiers 64 and 66 of the differential integrators (which the Examiner asserts corresponds to the claimed first and second integrators). The cited portions of cols. 4 and 5 of Tremblay do not disclose correcting first and second threshold values based on comparisons between the first and second internal control variables (threshold levels  $V^+$  and  $V^-$ ) and first and second setpoint values, respectively. Instead, the cited portions of cols. 4 and 5 disclose that the threshold levels  $V^+$  and  $V^-$  are supplied to resistors 74 and 76, respectively, of a performance

monitor 26. The resistors 74 and 76 form a potential divider which produces a single threshold level  $V_{opt}$ , at the tapping point between the resistors 74 and 76, having an optimal value between the threshold levels  $V+$  and  $V-$ . Further, if the Examiner asserts that the threshold levels  $V+$  and  $V-$  correspond to the claimed first and second thresholds, the threshold levels  $V+$  and  $V-$  are not corrected based on comparisons between first and second internal control variables and first and second setpoint values, respectively.

Accordingly, Applicant respectfully submits that claims 1 and 3 should be allowable because Tremblay, alone or in combination with Bulow, does not teach or suggest all of the features of the claims.

Method claims 6 and 7 recite limitations similar to those in claims 1 and 3. Accordingly, Applicant respectfully submits that method claims 6 and 7 should be allowable for the same reasons discussed above.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116  
U.S. Application No. 09/977,297

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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**23373**

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